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EXAMINER

VU, TUAN A

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/041,034	<b>Applicant(s)</b> GASSNER ET AL.	
	<b>Examiner</b> Tuan A. Vu	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the Applicant's response filed 9/25/06.

As indicated in Applicant's response, claims 4, 7-8, 15, 21, 29, 33, 37-38, 41, 45, 49, 55, 60, 65, 71, 75-77 have been amended. Claims 4-77 are pending in the office action.

#### *Claim Objections*

2. Claims 4, 37 are objected to because of the following informalities: the language phrased as 'user-modifiable personalization data allowing the users to each modify the functionality of elements ...' appears inappropriate use in light of the teaching from the Specifications. The user is disclosed as being able to modify personalization data characterizing some command or tab-order for a customizing in the application interface (see Specifications pg. 7, 2<sup>nd</sup> para; pg. 13, top). Data characterizing an element of an interface is hence subject to being modified and is not directly or actively *allowing the users to modify* as so recited. The process of modifying by the users allows some customization of the interface to happen, the data being modified indirectly supporting such customization since data is mere passive elements being acted upon by the user. It is the tool, the interface underlying code that allows the modifying, not the data, which is subjected to changes in the course of such modifying process. This phrase will be treated as the user's modification 'allowing the users to modify ... interaction model'; and as such claims 4, 17 as a whole would be repetitive in teaching and appear not to bring forth any further limitation to the previous subject matter recited as 'operable to allow users to modify ... interaction model' (see claim 4, lines 9-10; claim 37, lines 14-15 -- i.e. modifying data representing a interaction model entails customizing in order to change functionality integral to each of the model

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elements); and the above impropriety is objected to for superfluous or incorrect language that does not limit further the scope of the claim

Appropriate correction is required.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 5, 7, 21, 60, 65, 71 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 44, 66, 72, and 81 of copending Application No. 10,041,015 (hereinafter '015), in view of Beauchamp et al., USPN: 6,621,505.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following observations.

Following are but a few examples as to how the certain claims from the instant invention and from the above copending application are conflicting with each other.

**As per instant claim 5**, '015 claim 4 (or claim 44) recites an internet application system with user interface and web server, a customizable interaction model ( i.e. a customizable interaction model being the view-all-command), a metadata as in a repository for storing data

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characterizing the model (data stored in a repository, data defining a property of an element of the view all command); separately configurable interaction models ( i.e. more than one of the plurality of application user interfaces), plurality of application user interfaces separately configurable models (i.e. more than one generations of user interface are generated and configured with said property). But '015 claim 4 does not recite personalization engine or user profile interface configured to modify data characterizing the customizable model in more than one plurality of user interfaces, such user-modifiable personalization data allowing users to modify the functionality of elements in the interaction model for that user (Note: *the personalization data allowing* limitation will be treated as the user's modifying of data act).

However, Beauchamp teaches an activity including a plurality of screens being customized by client session and specific users using personal role and identity (e.g. col. 6, lines 45-48; *registered* col. 24 lines 59-64; col. 21, lines 50-56; *access control* -col. 23, lines 8-19; col. 6, lines 45-48; *registered* col. 24 lines 59-64). Based on the context in which plurality of interfaces is generated with state per instances thereof being preserved to be linked with one another ('015 preserving a state), it would have been obvious that the plurality of interfaces being generated for a view-all-command be allocated with means of verifying by Beauchamp (personalization engine or profile interface) such that specific linking of screens per session of one user would enable the customizing environment for a specific user (as in modifying functionality of elements on the customizable view or modeling interface) be verified before repository assets or application data can be distributed for such user's access and usage, i.e. 'allowing users to modify the functionality of elements in the interaction model for that user'.

As per instant claims 7, 21, '015 claim 4, or 44 does not recite communication timing but this timing is disclosed in Beauchamp (e.g. *one at a time* – col. 9, lines 31-46). It would have been obvious to add this timing step to '015 claim 5 context so that the Beauchamp's teaching in view of the user's customizing context in the instant claims based on the communication therein, would alleviate network usage or bandwidth by determining a correct time by which further data would need to be downloaded to a user-specific environment.

As per instant claims 60, 65, 71, '015 claims 66, 72, and 81 also recite generating HTML to incorporate into a model after using metadata in a page definition from a server via a client request.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 4-6, 15-32, and 37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 4 recites a system configured to support an internet application including a (i) interface generator, (ii) a web server; a personalization system including (iii) a personalization engine, (iv) a profile interface and (v) a data repository. From the specifications in regard to Figs. 1-4, it appears that the elements recited in (i) through (iv) are software-implemented entities. The claimed entities being 'operable to' perform or to allow some other entities do not make it clear that they are stored program instructions within tangible embodiment and thereby are actually being executed by a tangible machine to provide actual data transformation. The

repository of record in (v) is also construed as a database entity without a hardware medium to support persistence of software data.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a “useful, concrete, and tangible result” be accomplished. An “abstract idea” when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a “useful, concrete and tangible result”.

Claim 4 lacks sufficient teaching to convey that those entities are stored or embodied in tangible computer medium so as to enable the realization of their functionality; therefore amounts to a non-practical application because software-implemented functional elements not recited as being embodied in hardware medium would not enable the realization of their functionality into a real world output, which is required for the claimed invention to provide a concrete, useful, and tangible result as set forth above. The claim hence is rejected for leading to a non-statutory subject matter; and dependent claims 5-6 are also rejected for not remedying to the above deficiencies.

Claim 15 recites a system comprising an application interface, a metadata characterizing a model, and a repository. All of which have been construed as software implemented as set forth in claim 4 above. Not remedying the deficiency of claim 15, claims 16-20 are rejected for the same reasons as set forth above.

Claim 21 recites a system comprising an interface generator, (ii) a web server; a personalization system including (iii) a personalization engine, (iv) a profile interface and (v) a internet application. From the specifications in regard to Figs. 1-4, it appears that the elements recited above are software-implemented entities being configured to provide some functionality.

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The claim fails to provide a reasonable teaching that the claimed features can generate a tangible result; and is rejected for leading to a non-statutory subject matter. Dependent claims 22-28 are also rejected for not remedying to the above deficiencies.

Claim 29 recites an application comprising (i) a program embodied in a medium to run an internet application; (ii) an application user interface; and (iii) modifiable record stored in a remote physical location from a client for use by a interface generator; and (iv) a metadata for use by the user interface generator. There is insufficient teaching about how the internet program (i) thus embodied in a tangible medium interacts with the functionality of the elements recited as (ii) (iii) and (iv) in order for the claim as a whole to clearly establish that entities (ii) through (iv) are intrinsically stored in or supported by the above medium embodying entity (i). As it is, the internet application system as in (i) is communicating with but in physically disjoint manner with the rest of the claimed entities; that is, any interaction between (i) and the elements (ii) –(iv) is not reasonably indicative as being realized into a concrete result that would be stored in the physical (client) location or stored in the medium of (i). Lacking a medium to execute the software entities or to store the results from such execution, the claim as a whole does not amount to realizing the software entities into tangible results; that is, as a whole, the claim fails to provide a reasonable teaching that the claimed features can generate a tangible result; and is rejected for leading to a non-statutory subject matter. Dependent claims 30-32 are also rejected for not remedying to the above deficiencies.

Claim 37 recites a system comprising an application system including an interface generator, a web server, an application development system configured for generating metadata, a configuration system including a configuration engine and interface; a personalization engine,



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a user profile interface; and a data repository. As set forth in claim 4, there is insufficient teaching about whether all of the recited entities are stored or embodied in a tangible medium for their functionality to be realized into a result that can be tangibly attained. Thus, the entities recited as being 'configured to' perform some other entities do not make it clear that some action is taking place, nor do they convey that stored program instructions are actually being executed by a tangible machine. The claim is rejected for leading to a non-statutory subject matter.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 4-27, 29-77 are rejected under 35 U.S.C. 102(e) as being anticipated by

Beauchamp et al., USPN: 6,621,505 (hereinafter Beauchamp).

**As per claim 4**, Beauchamp discloses a customizable application system comprising:

an internet application system operable to support an internet application, the internet application associated with metadata (Fig. 10, 12) configured for generating a plurality of application user interfaces each having a customizable interaction model (e.g. *screens linked ... activity* – col. 4, lines 24-30; *predefined process* – col. 6, lines 49-59 – Note: activity related to a predefined process requiring linking of screens reads on a business target *model*), the internet application system including:

an user interface generator operable to generate the application user interface (e.g. col. 5, lines 12-16; *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44), and

a web application server operable to deliver the application user interface to a client (col. 5, line 63 to col. 6, line 15; col. 6, lines 45-48);

a personalization system including a personalization engine ( e.g. *protocol, HTTP* – col. 6, lines 45-48; registered col. 24 lines 59-64 - Note: protocol-bound session per client for HTTP request and login registration reads on personalization engine) and a user profile interface (e.g. col. 21, lines 50-56; access control -col. 23, lines 8-19 – Note: back end user being administered via enterprise control processes related to business object access/use reads on personal data being profiled for such access eligibility),

the personalization system operable to allow users to modify personalization data characterizing the customizable interaction model (e.g. *customize* - col. 4, lines 44-46) in more than one of the plurality of application user interfaces (*standardized screens, screen-to-screen* -- col. 4, lines 23-39);

the user-modifiable personalization data allowing users to modify the functionality of elements of the customizable interaction model for the user (Note: reusable screens being presented and customized by user to accommodate a particular process based on metadata for rendering such screen **reads on modifying functionality** of a customizable interface or model elements being presented – see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 -- because each interface elements have intrinsic functionality relative to the customizable model); and

a data repository including a data record for storing the personalization data (see step 402 –Fig. 14A), the data record being accessible using the metadata (col. 23, lines 39-49).

**As per claim 5**, Beauchamp discloses wherein members of the plurality of application user interfaces include separately configurable interaction models (e.g. col. 4, lines 24-30; col. 26, line 55 to col. 27, line 9; col. 17 lines 13-34).

**As per claim 6**, Beauchamp discloses that timing of communication between the client and the web application server is responsive to the interaction model (e.g. *one at a time* – col. 9, lines 31-46; Fig. 14A-B).

**As per claim 7**, Beauchamp discloses a system embodied in a computer-readable medium for developing an internet application including an application user interface, the system comprising:

an integrated development environment (integrated – col. 31-45) configured for a developer to specify a user interface element (e.g. Fig. 3-5) in the internet application user interface, the user interface element having a user customizable interaction model (e.g. *Activity* - col. 4, lines 24-30, *customize* - lines 44-46; *tree ...hierarchically* -col. 6, lines 16-23; *predefined process* – col. 6, lines 49-59; col. 17 lines 13-34),

the user customizable interaction model configured to determine timing of communication between a client displaying the application user interface and a server supporting the internet application (e.g. *one at a time* – col. 9, lines 31-46 – Note: feeding to a client side data according to one-at-a-time basis reads on determining on timing between providers and recipient client),

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the user customizable interaction model allowing each user of the interface to modify functionality of the user interface element (**Note:** reusable screens being presented and customized by user to accommodate a particular process based on metadata for rendering such screen **reads on modifying functionality** of a customizable interface or model elements being presented – see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 -- because each interface elements such as screens have intrinsic functionality relative to the model being customized);

application designer configured to produce metadata (e.g. col. 6, lines 59-65) to characterize the user customizable interaction model; and

a data repository including a user modifiable data record configured to further characterize the user-modifiable functionality (see above **Note**) of the user customizable interaction model (col. 6, lines 49-65), the data record being accessible using the metadata (col. 5, lines 32-58 – **Note:** rendering of screens based on stored metadata reads on using metadata to access predefined process associated screens).

**As per claim 8**, Beauchamp discloses that the integrated development environment is further configured to specify display of an interaction model control command (Fig. 3) in the application user interface, the interaction model control command being configured for a user (e.g. col. 11, lines 1-26; Fig. 14A-B) to change the user customizable interaction model.

**As per claim 9**, Beauchamp discloses deferred and immediate modes (e.g. step 418 – *waits* Fig. 14A; step 406, Fig. 14A – **Note:** immediate login feedback and waits for user reads on immediate and deferred modes, respectively).

**As per claim 10**, Beauchamp discloses that the user customizable interaction model is configurable according to the identity of a user or the identity of the client (e.g. *User, Role* - step 426, Fig. 14A)

**As per claim 11**, Beauchamp discloses that a state of the user customizable interaction model is further configurable to persist (e.g. *reused* – col. 4, lines 33-46; col. 18, lines 9-21) between uses of the application user interface.

**As per claims 12-14**, Beauchamp discloses that a modifiable record is user modifiable using a configuration system (e.g. col. 4, lines 23-46; Fig. 3-5), wherein the user modifiable data record is user modifiable using a personalization system (e.g. col. 6, lines 45-48; *registered* col. 24 lines 59-64; col. 21, lines 50-56; access control -col. 23, lines 8-19); wherein the personalization system is included in the internet application (col. 6, lines 45-48; *registered* col. 24 lines 59-64).

**As per claim 15**, Beauchamp discloses a customizable application system comprising:  
an internet application system configured to support an internet application (col. 4, lines 23-39); an application user interface including a user interface element, the application user interface configured as an interface between the internet application and a user (e.g. Fig. 3-5);

the user interface element including a customizable interaction model (e.g. *Activity* - col. 4, lines 24-30, *customize* - lines 44-46; *predefined process* – col. 6, lines 49-59; col. 17 lines 13-34) allowing the user to modify functionality of the user interface element (see col. 4, li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 – Note: each interface elements such as screens have intrinsic functionality relative to the model being customized), the user interface

element with user-modifiable functionality configured for delivery to a client over a computer network (col. 5, lines 30-59);

metadata characterizing the customizable interaction model (e.g. *metadata* - col. 5, lines 32-58; col. 6, lines 58-62); and

a data repository including a data record for characterizing with the customizable interaction model, the data record being user modifiable(e.g. col. 6, lines 49-65; col. 5, lines 32-58) and being accessible using the metadata.

**As per claim 16**, Beauchamp discloses wherein the application user interface is configured for display on the client using standard web browser protocols (e.g. col. 6, lines 16-48).

**As per claim 17**, Beauchamp discloses wherein the application user interface is further configured for display on the client using features of a web browser (col. 15, line 50 to col. 16, line 34), the features not requiring a browser add-on, plug-in, or extension.

**As per claims 18-20**, Beauchamp discloses means for generating the application user interface using the metadata (e.g. col. 6, lines 57-62; col. 18, lines 9-21); including a configuration system configured to modify the data record (e.g. col. 4, lines 23-46; Fig. 3-5 – Note: navigation by user from screens to have process data populated into a standard screens reads on modifying a record); wherein the configuration system is included in the internet application (e.g. *HTML page 36 –Applications*, Fig. 2).

**As per claim 21**, Beauchamp discloses an internet application system comprising:

a user interface generator configured to generate an application user interface (e.g. col. 5, lines 12-16; *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44),

the application user interface being compatible with a standard web browser and being generated in response to a request from a user (col. 6, line 45 to col. 7, line 40),

the user interface including a user customizable interaction model (e.g. *Activity* - col. 4, lines 24-30, *customize* - lines 44-46; *predefined process* - col. 6, lines 49-59; col. 17 lines 13-34), the user customizable interaction model configured to determine timing of communication from a client displaying the application user interface (*one at a time* - col. 9, lines 31-46), the user customizable interaction model further allowing each user of the interface to modify functionality of at least one user interface element (see col. 4, li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 -- Note: each interface elements such as screens have intrinsic functionality relative to the model being customized);

a web application server configured to deliver the application user interface including the user-modified functionality to the client (e.g. col. 15, lines 50-65); and an internet application accessible to the user through the generated application user interface (Fig. 3-5; *HTML page 36* - Applications, Fig. 2) .

**As per claim 22**, Beauchamp discloses wherein the user interface generator is further configured to use metadata (e.g. *metadata* - col. 5, lines 32-58; col. 6, lines 58-62) to characterize the user customizable interaction model.

**As per claim 23**, Beauchamp discloses wherein the user customizable interaction model is specific to a user interface element (Fig. 14A; User/Role – step 456 – Fig. 14B; *Customer specific* - Fig. 16) included in the application user interface.

**As per claim 24**, Beauchamp discloses wherein the user interface generator is customizable interaction model (e.g. Fig. 3-5; step 414, Fig. 14A).

**As per claims 25-27**, refer to corresponding rejections as set forth in claims 12, 10, and 9 respectively.

**As per claim 29**, Beauchamp discloses an internet application comprising:

a computer program embodied in a computer-readable medium and configured to run on an internet application system; an application user interface including a user interface element (e.g. *predefined process, screen, tree ... hierarchically* - col. 5, line 60 to col. 6, line 23 – Note: activity screens with tree screen for hierarchically presenting a *predefined process* reads on interface element for interactively customizing a model) with a customizable interaction model, the application user interface configured for delivery (e.g. Fig. 7-10) to a client and to operate as an interface between a user and the computer program;

a user modifiable data record stored in a location physically remote from the client (e.g. col. 5, lines 41-53; Fig. 7-10), the data record configurable for use by a user interface generator to generate the application user interface, the data record (e.g. *metadata, reused ...screens navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44) configurable by a user to allow the user to modify functionality of the user interface element, the record characterizing the customizable interaction model including user-modified functionality (e.g. col. 5, lines 12-16; *navigational control data, rendering screens, list screens, launch*



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*screens* - col. 6, lines 7-44 – Note: each model being customized signifies being recorded so to encompass the customized elements being acted upon by the user for a particular web application); and

metadata configurable for use by the user interface generator to access the user modifiable data record (e.g. col. 5, lines 49-59).

**As per claims 30-32**, refer to corresponding rejections as set forth in claims 9, 10, and 13 respectively.

**As per claim 33**, Beauchamp discloses an application user interface embodied in a computer readable medium and configured for communication between a user and an internet application,

the application user interface being generated using metadata (e.g. Fig. 10, 12; col. 5, lines 49-59) configured to access a user modifiable data record (Fig. 7-10) allowing the user to modify functionality of at least one user interface element (col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48) in the application user interface,

the application user interface including the at least one user interface element (col. 5, line 60 to col. 6, line 23 ) configured for display using a standard web browser,

the user interface element including a user customizable interaction model, the user customizable interaction model being characterized by the user modifiable data record (e.g. Fig. 7-10; *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44).

**As per claims 34-35**, refer to corresponding rejections as set forth in claims 26-27, respectively.

**As per claim 36**, Beauchamp discloses wherein the user customizable interaction model is responsive to a command displayed on the interface (e.g. Fig. 3-5, Fig. 14A)

**As per claim 37**, Beauchamp discloses a customizable application system comprising:  
an internet application system configured to support an internet application, the internet application including metadata configured for generating an application user interface, the internet application system including,

a user interface generator (to generate ...), and  
a web application server (to deliver ...) the application user interface to a client,  
an application development system configured to generate the metadata, the metadata being further configured to characterize a user customizable interaction model of the application user interface ( see Fig. 10, 12);

a configuration system including a configuration engine and a configuration interface, the configuration interface configured to modify configuration data characterizing the user customizable interaction model;

a personalization system including a personalization engine ( e.g. *protocol*, *HTTP* – col. 6, lines 45-48; registered col. 24 lines 59-64 - Note: protocol-bound session per client for HTTP request and login registration reads on personalization engine) and a user profile interface (e.g. col. 21, lines 50-56; access control -col. 23, lines 8-19 – Note: back end user being administered via enterprise control processes related to business object access/use reads on personal data being profiled for such access eligibility),

the personalization system operable to allow users to modify personalization data characterizing the customizable interaction model (e.g. *customize* - col. 4, lines 44-46) in more

than one of the plurality of application user interfaces (*standardized screens, screen-to-screen --* col. 4, lines 23-39);

the user-modifiable personalization data allowing users to modify the functionality of elements of the customizable interaction model for the user (Note: reusable screens being presented and customized by user to accommodate a particular process based on metadata for rendering such screen **reads on modifying functionality** of a customizable interface or model elements being presented – see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 -- because each interface elements have intrinsic functionality relative to the customizable model); and

a data repository including a data record configured to store the configuration and personalization data (Note: reusable screens and metadata reads on configuration and personalization data being recorded) the data record being accessible using the metadata; most of these limitations being similar to those recited in claim 4.

Hence, the rejection of these similar limitations is to be referred back to the respective rejections as set forth in claim 4.

**As per claim 38**, Beauchamp discloses a method of developing an application user interface associated with an internet application, the method comprising the steps of:

selecting a user customizable interaction model characterized by a data record (e.g. Fig. 10, steps 410 → 414, Fig. 14A; step 452, Fig. 14B), the data record being stored in a data repository and being user modifiable allowing the user to modify functionality of the user interface element (see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48), the

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data repository being physically remote from a client used to display the application user interface ( e.g. Fig. 10, 12 );

including the user customizable interaction model in the application user interface (step 434, Fig. 14B);

generating metadata characterizing the user customizable interaction model including the user-modified functionality(e.g. Fig. 9-10 ; col. 5, lines 12-16; *navigational control data*, *rendering screens*, *list screens*, *launch screens* - col. 6, lines 7-44 – Note: each model being customized signifies being recorded so to encompass the customized elements being acted upon(or modified) by the user for a particular web application), the metadata including a reference to the data record; and storing the metadata in association with the internet application (e.g. steps 464, 466- Fig. 14B; Fig. 10; *reused* – col. 4, lines 31-46), the internet application being configured for access using the application user interface.

**As per claim 39**, Beauchamp discloses wherein the application user interface includes an interaction model control command (e.g. Fig. 3-5, Fig. 14A).

**As per claim 40**, Beauchamp discloses determining when communication occurs between the client and the internet application responsive to the interaction model (e.g. step 408, Fig 14A; steps 440 through steps 446, 452, 466, 472, 478, Fig. 14B).

**As per claim 41**, Beauchamp discloses a method of generating an application user interface, the method comprising the steps of:

accessing a page definition, the page definition (e.g. Fig. 8, *metadata* - Fig. 13) including metadata associated with a customizable property of a interaction model;

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accessing a data record using the metadata, the data record being stored in a data repository and being user modifiable (Fig. 9), allowing the user to modify the customizable property (see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 – Note: any metadata representing a property to render an application reads on property being modified via customizing screens of a model instance)the data repository being physically remote from a client used to display the application user interface (e.g. Fig. 8; col. 5, line 41 to col. 6, line 34) ;

determining a value characterizing the customizable property (e.g. col. 6, line 52-65; Fig 14A-B – Note: using metadata to specify customizable screens according to a predefinition reads on customizable property associated with the screens being selected via the XML specification or personal or reusable/legacy data stored in server – col. 21, lines 40-67, Fig. 6) using the data record;

generating markup-language responsive to the determined value (e.g. col. 15, line 51 to col. 16, line 3); and including the generated markup-language in the application user interface the application user interface being an interface to an internet application (e.g. Fig. 2).

**As per claims 42 and 44**, refer to claim 13, and 10, respectively.

**As per claim 43**, Beauchamp discloses wherein the customized property includes a deferred mode (step 418 – *waits* Fig. 14A).

**As per claim 45**, Beauchamp discloses a method of developing an HTML based application user interface including a user customizable interaction model, the method comprising the steps of:

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selecting a user customizable interaction model associated with a data record (e.g. step 452, Fig. 14A) and specifying functionality of at least one interface element in the application user interface (col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48 -- Note: each interface elements such as screens being specified by users have intrinsic functionality relative to the model being customized),

the data record being configurable by the user (Note: each model being customized signifies being recorded so to encompass the customized elements being acted upon(or modified) by the user for a particular web application) for characterizing the user customizable interaction model; the user customizable interaction model including a plurality of interaction modes (e.g. *screens , predefined process* - col. 5, line 60 to col. 6, line 23; Fig. 3-5);

including the user customizable interaction model in the HTML based application user interface (e.g. Fig. 2, 9);

generating metadata characterizing the user customizable interaction model, the metadata including a reference to the data record (steps 464, 466- Fig. 14B; Fig. 10); and storing the metadata in association with an application, the application being configured for access using the application user interface ( e.g. *reused* – col. 4, lines 31-46 ).

**As per claims 46-47**, refer to claims 36 and 9, respectively.

**As per claim 48**, Beauchamp discloses wherein a customizable state of the user customizable interaction model is configurable to persist between uses of the HTML based application user interface (*reused* – col. 4, lines 31-46).

**As per claim 49**, Beauchamp discloses a method of customizing a interaction model in an HTML based application user interface, the method comprising the steps of:

accessing a configuration system, the configuration system including a configuration engine and a configuration interface (e.g. *business object, predefined process, screens*- col. 5, line 40 to col. 6, line 15);

selecting, using the configuration interface (Fig. 14A-B; Fig. 2 ), a user interface element (e.g. *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44) in the HTML based application user interface, the user interface element including a user customizable interaction model; and

specifying configuration data using the configuration interface, the configuration data characterizing the user customizable interaction model and specifying functionality of at least one interface element in the application user interface (col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48); the configuration data being stored in a data repository physically remote from a client used to view the HTML-based application user interface (e.g. col. 5, line 40 to col. 6, line 44; Fig. 14A-B – Note: information retrieved from metadata to associate plurality of screens to link reads on configuration data being specified for a screens selection).

**As per claim 50**, Beauchamp discloses including a step of including a command to modify the user customizable interaction model, in the HTML based application user interface (Assign, Pause, Cancel, Next -- Fig. 3-4).

**As per claim 51**, wherein the configuration data is configurable to characterize a subset of all user interface elements (e.g. *hierarchically, navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44 – Note: list of screens and hierarchy of navigable screens reads on subsets of interface elements configurable by the user) in the HTML based application user interface.

**As per claims 52-53**, refer to rejection in claims 6 (e.g. col. 9, lines 31-46; Fig. 14A-B), and 13, respectively.

**As per claim 54**, see Beauchamp (see Fig. 6-8, 12-13).

**As per claim 55**, Beauchamp discloses a method of customizing an interaction model in an application user interface, the method comprising the steps of:

accessing a configuration system, the configuration system including a configuration engine and a configuration interface;

selecting, using the configuration interface, the interaction model in the application user interface, the interaction model being user customizable;

specifying configuration data using the configuration interface, the configuration data characterizing the interaction model; and specifying functionality of at least one interface element in the application user interface (col. 4, li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48). All of which steps have been addressed in claim 49 above.

Beauchamp further discloses storing the configuration data (Fig. 13); and generating the application user interface using the specified configuration data ( Fig. 14A-B), the application user interface being HTML based (Fig. 6-8, 12-13) and being configured to access an internet application.

**As per claims 56-58**, refer to corresponding rejections as set forth in claims 54, 35, and 36, respectively.

**As per claim 59**, Beauchamp discloses that configuration data is user modifiable (refer to claims 8, 12-13).



**As per claim 60**, Beauchamp discloses a method of executing an internet application comprising the steps of:

receiving a request for an application user interface from a client, the application user interface including a user interface element;

accessing a page definition, the page definition including metadata characterizing the application user interface;

retrieving a value characterizing a customizable interaction model associated with the user interface element using the metadata, the value being stored in a data repository physically remote (Fig. 9) from the client, the value being specified ( Note: a given screen GUI item being selected reads on a value being chosen – see Fig. 5, Fig. 15 – because each screen is stored as a repository value) by a user in order to modify functionality of at least one interface element in the application user interface (col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48); i.e. all of which steps limitations have been addressed in claim 41.

generating HTML responsive to the retrieved value; including the generated HTML in the application user interface (e.g. col. 15, line 51 to col. 16, line 3; Fig. 10-13); and delivering the application user interface to the client, the application user interface being an interface between a user and the internet application (*screens* – Fig. 14A-B).

**As per claims 61, 63**, refer to claim 27, 54, respectively.

**As per claims 62, 64**, refer to the rationale addressing personalization of claims 10, 13.

**As per claim 65**, Beauchamp discloses a method of generating an application user interface including a customizable interaction model, the method comprising the steps of:

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accessing a page definition (XML metadata – col. 6, lines 60-65) , the page definition including metadata characterizing the customizable interaction model, the customizable interaction model configured to characterize communication from a client (e.g. *screens* - Fig. 14), the client being configurable to display the application user interface (e.g. Fig. 3-5);

reading a value from a data record using the metadata (col. 15, line 51 to col. 16, line 3), the data record being stored in a data repository and being user modifiable allowing a user to modify functionality of at least one interface element in the application user interface (col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48), the data repository being physically remote from the client (e.g. col. 5, line 40 to col. 6, line 44);

characterizing a state of the customizable interaction model using the value (e.g. *User selects, Client sends State, Determine next Screen* – Fig. 14B); generating HTML responsive to the state (steps 440 through steps 446, 452, 466, 472, 478, Fig. 14B – Note: generating of metadata from the user feedback reads on generating HTML responsive to state and incorporating such HTML in the application); and including the generated HTML in the application user interface(e.g. col. 15, line 51 to col. 16, line 3).

**As per claims 66-70**, refer to the corresponding rejections addressing claims 51, 58, 11, 54, and 44, respectively.

**As per claim 71**, Beauchamp discloses a method of generating an application user interface configured for delivery a server to a client, the method comprising the steps of:

receiving, at the server, a request for the application user interface from the client;

identifying the requester of the application user interface, the application user interface including a user customizable interaction model;

accessing a page definition, the page definition including metadata and characterizing the application user interface ( *XML metadata* - col. 5, line 38 to col. 6, line 6);

retrieving, using the metadata and the identity of the requester, a value for characterizing the user customizable interaction model, the value being selected by a requestor in order to modify functionality of at least on UI element in the application user interface ( Note: a given screen GUI item being selected reads on a value being chosen – see Fig. 5, Fig. 15 – because each screen is stored as a repository), the value being stored in a data repository (screens - Fig. 14A-B; Fig. 9 and related text – Note: screen identifier or *NameValue* being parsed from XML file reads on value stored in repository );

generating HTML incorporating the interaction model using the value; including the generated HTML in the application user interface (Fig. 10-13); and delivering the application user interface from the server to the client.

**As per claims 72-74**, refer to the corresponding rejections addressing claims 6, 9, and 39, respectively.

**As per claim 75**, Beauchamp discloses a computer readable medium including an internet application, the internet application comprising:

metadata defining an application user interface, the application user interface including a interface element with a user customizable interaction model allowing a user to modify functionality of at least one interface element in the application user interface (col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48),

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the application user interface configured for delivery to a client and configured to operate as an interface between a user and the internet application ( e.g. *metadata, screens, predefined process* - col. 5 line 40 to col. 6, line 44; col. 6, lines 60-65);

a user interface generator configured to generate the application user interface using a user modifiable data record (e.g. *metadata, screens* – Fig. 14A-B; col. 6, lines 60-65) stored in a location physically remote from the client,

the user modifiable data record configurable to characterize the user customizable interaction model including the user-modifiable functionality (e.g. Fig. 9-10 ; col. 5, lines 12-16; *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44 – Note: model being customized with screens specified by users for a targeted application instance reads on record including user-modifiable functionality); and

a configuration system configured for a user to modify the user modifiable data record (e.g. *predefined process, rendering screens, tree screen, populating, editing* - col. 6, lines 13-65).

**As per claim 76**, Beauchamp discloses a computer readable medium including an internet application, the internet application comprising:

an application designer configured to develop an application user interface (Fig. 8-11), the user interface including a user interface element allowing each user of the interface to modify functionality of the user interface element (**Note**: reusable screens being presented and customized by user to accommodate a particular process based on metadata for rendering such screen **reads on modifying functionality** of a customizable interface or model elements being presented – see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48),

the application user interface configured for delivery to a client and configured to operate as an interface between a user and the internet application (e.g. *metadata, screens, predefined process* - col. 5 line 40 to col. 6, line 6);

a user interface generator configured to generate the application user interface using a user modifiable data record stored in a location physically remote from the client (e.g. col. 6, lines 13-65),

the user modifiable data record configurable to characterize the user customizable interaction model (e.g. *metadata, screens* – Fig. 14A-B) including the user-modifiable functionality ( see above **Note** because each model reads on a record of the customized elements); and a configuration system configured for a user to modify the user modifiable data record.

**As per claim 77**, Beauchamp discloses an application execution system comprising:

means for supporting an internet application (Fig. 2);

means for allowing each user of the interface to modify functionality of the user interface element (**Note**: reusable screens being presented and customized by user to accommodate a particular process based on metadata for rendering such screen **reads on modifying functionality** of a customizable interface or model elements being presented – see col. 4 , li. 44-46; col. 5, line 60 to col. 6, line 44; col. 15, lines 45-48)

means for generating the application user interface (e.g. *rendering* - col. 6, lines 13-65; col. 4, lines 24-30) using a user modifiable data record configured to store data characterizing a user customizable interaction model (col. 6, lines 60-65) including the user-modifiable

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functionality (e.g. Fig. 9-10 ; col. 5, lines 12-16; *navigational control data, rendering screens, list screens, launch screens* - col. 6, lines 7-44); and

means for providing the application user interface to a user, the application user interface including the at least one user interface element (*screens* – Fig. 14A-B), the application user interface configured as an interface between the internet application and the user, the user interface element including the user customizable interaction model (e.g. *tree ...hierarchically, predefined process* - col. 5 line 40 to col. 6, line 6), the user interface element configured for delivery to a client over a computer network (Fig. 14A-B; Fig. 9).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beauchamp et al., USPN: 6,621,505 as applied to claim 21 above, and further in view of Helgeson et al. USPN: 6,643,652 ( hereinafter Helgeson).

**As per claim 28**, Beauchamp does not disclose a client wireless system; but at the time the invention was made, the use of browser markup language as carrier of specification data, -- such as XML -- has been used to communicate with devices in all type of networks wherein wireless protocol for wireless portable or embedded processing units was a known and evolving methodology. In a method to extend the browser functionality similar to Beauchamp creating of browser metadata (Fig. 6), Helgeson discloses a client machine being a wireless device (cellular

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phone 411, Fig. 4). Hence, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include in the client system of Beauchamp wireless devices as taught by Helgeson because rendering of client interface environment using metadata specified via a carrier like XML metadata would enable those wireless system to obtain support from server providers without a sustained link with such service; and thus by means of wireless protocol as taught above XML-formatted specification would provide resource-efficient support for dynamic for a as-needed basis application specification in order to render browser functionality as purported by Beauchamp, in view of the known concept that wireless devices entail restricted storage resources.

***Response to Arguments***

11. Applicant's arguments filed 9/25/06 have been fully considered but they are not persuasive. Following are the Examiner's observations in regard thereto.

**USC §101 Rejection:**

(A) The changes to the claims are not sufficient to establish support of hardware device to embody the claimed entities; and this has been explained in the current Rejection.

**Double Patenting Rejection:**

(B) The amendments to the claims are not specifically establishing distinguishing details so as to overcome the rationale of rejection; and this is explained in the Office Action.

**USC §102 Rejection:**

(C) Applicant has submitted that Beauchamp does not disclose allowing a user to modify the functionality of any elements of a user interface ( Appl. Rmrks, pg. 19, middle). The rejection as set forth in the Office Action has indicated how the screen elements in the interactive interface

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by Beauchamp specifically map to the limitation above. First, *elements of a user interface* is not recited throughout all the claims; but in the few instances they are, the interpretation of these elements can still be such that they are elements inside in modeling screen as purported by Beauchamp, and such interpretation has been explained at length as Note accompanying the corresponding citations by Beauchamp to map where such limitation is recited. Second, the phrase 'modify the functionality of elements' does not convey a particular technique that undoubtedly preclude Beauchamp's teaching via user's altering of the model elements via selecting or deleting screens; and explanation for how this reads on 'modifyg a functionality' has been set forth in the corresponding rejection. The language of the claim remains not specific enough to otherwise interdict/exclude a teaching from Beauchamp from reading on the newly added features; and according to the above CLAIM OBJECTION, the added limitation is either superfluous; or at best does not enforce a scheme of modification such that any special element being altered would be different from those being altered by the Beauchamp's user or developer. If the UI elements in question were to be specifically a GUI architectural-type of component, like a toolbar or a border, the claim language would be still far from reaching such level of specificity expected to bend one skill in the art's interpretation in that direction; simply because any element in a GUI screen has functionality; and an element therein can be more than just a button, a color or a border. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

**USC §103(a) Rejection:**



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(D) Applicant has submitted that Helgeson does not teach or suggest 'customizable interaction model ... any elements of a user interface' (Appl. Rmrks, pg. 20, top). The rationale as to how Helgeson's teaching support a combination with Beauchamp to render a limitation obvious does not implicate the need to address the above limitation, which has been deemed anticipated in light of the above sections by Beauchamp. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore, the rejection is deemed non persuasive for lack of prima facie reasoning.

In view of the above, the claims stand rejected as set forth in the rejections.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 ( for non-official correspondence - please consult Examiner before using) or 571-273-8300 ( for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu  
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Art Unit 2193  
November 30, 2006